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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,054	08/20/2003	Michael Joseph Stirniman	SEAG-STL-2930P1	5143

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EXAMINER
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MACARTHUR, SYLVIA

ART UNIT	PAPER NUMBER
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1716

NOTIFICATION DATE	DELIVERY MODE
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07/07/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

officeaction@mhbpatents.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/644,054	<b>Applicant(s)</b> STIRNIMAN ET AL.	
	<b>Examiner</b> Sylvia R. MacArthur	<b>Art Unit</b> 1716	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 13-23, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-15, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's after final request dated 6/10/2010 for reconsideration of the combination of the prior art of Dick et al (US 5,904,958) and Liehr et al (US 6,487,986) in the final office action of 4/16/2010 was found pervasive, upon review of the claims of 1/6/2010 new prior art by Branderhorst et al (US 5,196,064) and Segerstrom et al (EP 0318071) is introduced to teach the structure of threaded nozzles. The finality of the previous action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 are rejected under 35 U.S.C. 102(b) as anticipated by Branderhorst et al (US 5,196,064) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liehr et al (US 6,487,986) in view of Branderhorst et al (US 5,196,064) or Segerstrom et al (EP 0318071).

4. The prior art of Branderhorst et al teaches a replaceable fluid dispensing nozzle (note that the nozzle is inherently capable of supplying a vapor as the type of fluid supplied does not structurally limit the apparatus). The apparatus of Branderhorst et al features an elongated source (bridge plate 170) that comprises a chamber communicating with a plurality of primary plugs (110, 15)) and threaded holes that primary pugs are screwed into, see Figures illustrate that each of the plugs comprises a drilled hole (128) and two openings see inlet and outlets illustrated in Fig.3.

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5. In the alternative, it is noted that Branderhorst et al fails to specifically teach that the apparatus supplies a lubricant vapor.

6. The apparatus of Liehr et al teaches an elongated vapor source (chamber 1). Liehr et al fails to teach an apparatus wherein said lubricant vapor source (c) comprises at least a plurality of threaded holes into which said plugs are screwed therein. Recall the teachings of the prior art of Branderhorst et al. The motivation to combine the teachings of Branderhorst et al with the apparatus of Liehr et al is that the nozzles of Branderhorst et al are replaceable and can be removed and reused making them advantageous for maintenance. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to use the nozzle of Branderhorst et al in the apparatus of Liehr et al.

7. Likewise the apparatus of Liehr et al could have been combined with the prior art of Segerstrom et al which teaches threaded plugs and their ability to provide adjustable spray configurations. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to use the nozzle of Segerstrom et al et al in the apparatus of Liehr et al.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 2-8, 13-15, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liehr et al (US 6,487,986) in view of Branderhorst et al (US 5,196,064).

The prior art of Liehr et al (US 6,487,986) teaches an elongated vapor source (chamber 1) with plugs (manifold 10/nozzles 11, 11', 11'', ...) that have two openings (an inlet and an outlet) that extend the length of the interior of each plug. The source is closed and provided with heat via glow wires (7, 7', 7'').

Liehr et al fails to teach an apparatus wherein said lubricant vapor source (c) comprises at least a plurality of threaded holes into which said plugs are screwed therein.

9. Recall the teachings of the prior art of Branderhorst et al. The motivation to combine the teachings of Branderhorst et al with the apparatus of Liehr et al is that the nozzles of Branderhorst et al are replaceable and can be removed and reused making them advantageous for maintenance. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to use the nozzle of Branderhorst et al in the apparatus of Liehr et al.

Regarding claim 2: The apparatus according to claim 1, wherein said chamber (a) is adapted for maintaining said interior space at a pressure below atmospheric pressure, see Figures 1 and 2 and the slit airlocks of Liehr et al et al.

Regarding claims 3, 13, and 14: The apparatus according to claim 1, wherein said substrate loader/unloader (b) is adapted for providing cooling/condensation (cooled carrier 3 of Liehr et al) of said lubricant vapor for preventing escape of said lubricant vapor from said interior space of said chamber when the substrate is cooled the vapor disposed thereabout is cooled as well.

Regarding claims 4 and 5: Though Liehr et al does teach a disk shaped substrate 5, the examiner recognizes that the inclusion of material or an article worked upon by a structure being claimed

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does not impart patentability to the claims. In re Young, 75 F. 2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). Furthermore, note that the apparatus is what it is and not what it does; the type of substrate used does not structurally limit the apparatus and is not given patentable weight.

Regarding claim 6: Recall the chamber of Liehr et al is closed via airlocks 6a, 6b see Figures and is heated via glow wires see col. 3 lines 1-28.

Regarding claims 7 and 8: See Liehr et al teaches nozzles 10-13 of which some are primary and the other are secondary plugs named and delineated at the inventor's discretion. The plugs are provided over the length of the source see Figures and abstract.

Regarding claim 15: The plugs of Liehr et al et al are formed in a linear and rectangular array, see Figures 1 and 2.

Regarding claims 28 and 29: The plugs having a pattern wherein the plugs at the outer edges have a smaller diameter than the plugs adjacent to the middle of the vapor source, the arrangement of the plugs and are interpreted as a matter of optimization without a showing of criticality of this arrangement, shape, or rearrangement of the plugs. The courts have held that without a showing of criticality of the shape, arrangement of a structure, the optimization of such is a prima facie case of obviousness; see In re Japsike, In re Dailey et al.

10. Applicant's amendment of 1/6/2010 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia R. MacArthur whose telephone number is 571-272-1438. The examiner can normally be reached on M-Th during the hours of 8 a.m. and 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 1, 2010

/Sylvia R MacArthur/

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Primary Examiner, Art Unit 1716